



NEAR EAST UNIVERSITY  
INSTITUTE OF GRADUTE STUDIES  
GENERAL PSYCHOLOGY PROGRAM

**THE INFLUENCE OF FACEBOOK ADDICTION ON THE  
ACADEMIC PERFORMANCE, AFFECTIVE AND COGNITIVE  
DEVELOPMENT OF SECONDARY SCHOOL STUDENTS.**

AISHAT IDOWU ALAMU

MASTER'S THESIS

NICOSIA  
2021

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THESIS SUPERVISOR  
DR. GLORIA MANYERUKE

NICOSIA  
2021

## **ACCEPTANCE/APPROVAL**

We as the jury members certify the “The influence of Facebook Addiction on the academic performance, affective and cognitive development of secondary school students” prepared by Aishat Idowu Alamu, defended on 23/August/2021, has been found satisfactory for the award of degree of Master

### **JURY MEMBERS**

**Dr. Gloria Manyeruke**

Near East University/ Faculty of Arts and Science

**Asst. Prof. Dr. Ezgi Ulu**

Near East University/Faculty of Arts and Sciences

**Asst. Prof. Dr. Pervin Yigit**

Near East University/Faculty of Arts and Sciences

**Prof. Dr. K. Husnu Can Baser**

Near East University/Faculty of Arts and Sciences

Institute Of Graduate Studies

Director

## DECLARATION

I Aishat Idowu Alamu, hereby declare that this dissertation entitled 'The influence of Facebook addiction on the academic performance, affective and cognitive development of secondary school students' has been prepared myself under the guidance and supervision of 'Dr. Gloria Manyeruke' in partial fulfilment of the Near East University, Graduate School of Social Sciences regulations and does not to the best of my knowledge breach and Law of Copyrights and has been tested for plagiarism and a copy of the result can be found in the Thesis.

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## **DEDICATION**

This study is dedicated to my family and friends. I appreciate the assistance. Lastly, I dedicate this research to God Almighty.

## **ACKNOWLEDGEMENT**

I would like to thank Almighty God for making this happen. He alone has been the reason why I am here today. I want to also thank God for giving me wonderful tutors, who would go any length to lead one in the right direction.

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I want to say a big thanks to you all for giving me a memorable experience in Near East University. God Bless you all.

Lefkosia, August, 2021.

Aishat Idowu Alamu

## ABSTRACT

### **THE INFLUENCE OF FACEBOOK ADDICTION ON THE ACADEMIC PERFORMANCE, AFFECTIVE AND COGNITIVE DEVELOPMENT OF SECONDARY SCHOOL STUDENTS.**

This study aimed to investigate the relationship between Facebook addiction, affective development, cognitive development and academic performance among secondary school students in Abeokuta region of Nigeria. 232 students from secondary schools in Abeokuta participated in the study adopting a convenience sampling method. The findings showed that there is a significant negative correlation between Facebook addiction, affective development, cognitive development and academic performance. This is congruent with findings of previous studies. The result of this study revealed that male students are more affected than female student by Facebook addiction. The study also revealed that students in ss3 level in high school are more affected by Facebook addiction. It also reveals that student with above 500 friends and above number of Facebook friends of secondary school students are more affected by Facebook addiction. Lastly, high school students who spend 4 hours and more on Facebook daily are more affected by Facebook addiction. The study recommends that mobile phone devices should be prohibited from use in secondary school environments.

**Keywords:** Facebook Addiction, Affective Development, Cognitive Development, Academic Performance, High School Student.

## ÖZ

### **THE INFLUENCE OF FACEBOOK ADDICTION ON THE ACADEMIC PERFORMANCE, AFFECTIVE AND COGNITIVE DEVELOPMENT OF SECONDARY SCHOOL STUDENTS.**

Bu çalışma, Nijerya'nın Abeokuta bölgesindeki ortaokul öğrencileri arasında Facebook bağımlılığı, duyuşsal gelişim, bilişsel gelişim ve akademik performans arasındaki ilişkiyi araştırmayı amaçlamıştır. Abeokuta'daki ortaokullardan 232 öğrenci kolayda örnekleme yöntemiyle çalışmaya katılmıştır. Bulgular, Facebook bağımlılığı, duyuşsal gelişim, bilişsel gelişim ve akademik performans arasında anlamlı bir negatif ilişki olduğunu göstermiştir. Bu, önceki çalışmaların bulgularıyla uyumludur. Bu çalışmanın sonucu, erkek öğrencilerin Facebook bağımlılığından kız öğrencilere göre daha fazla etkilendiğini ortaya koymuştur. Araştırma ayrıca lisede ss3 seviyesindeki öğrencilerin Facebook bağımlılığından daha fazla etkilendiğini ortaya koydu. Ayrıca 300'den fazla arkadaşı olan öğrencilerin ve ortaokul öğrencilerinin Facebook arkadaş sayısının üzerinde olan öğrencilerin Facebook bağımlılığından daha fazla etkilendiğini ortaya koymaktadır. Son olarak, Facebook'ta günde 4 saat ve daha fazla vakit geçiren lise öğrencileri Facebook bağımlılığından daha fazla etkileniyor. Çalışma, cep telefonu cihazlarının ortaokul ortamlarında kullanılmasının yasaklanmasını önermektedir.

**Anahtar Sözcükler:** Facebook Bağımlılığı, Duyuşsal Gelişim, Bilişsel Gelişim, Akademik Performans, Lise Öğrencisi.



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## ABBREVIATIONS

SNS	Social networking site
UGT	Uses and Gratifications Theory
IAT	Internet Addiction Test
SPSS	Statistical Package for Social Science

## **CHAPTER ONE**

### **INTRODUCTION**

The Facebook social media networking site has attracted attention among students, it offers a platform on which the students communicate for social, personal and business purposes (Manca, 2020; Habes et al., 2018). The technology has become an integral part of the college and secondary school student's personal life as it serves as a platform in which the students socialize, share and generate content such as pictures, status, comments and others.

The evolution of social media in general, has positive and negative impacts, which have transformed learning, communication, research and education. Among the vast variety of social media networking sites that are available for communication and interaction, Facebook is one of the most modern and attractive tools for connecting people around the world (Salloum, Al-Emran, & Shaalan, 2017). Today Facebook has over 1 billion active users around the world and 584 million people on average use Facebook regularly (Sharif et al., 2021). According to Ernala et al. (2020) consumers within the age of 16 to 25 constitute the highest demographic group on Facebook.

Facebook was initially developed as a vehicle for students to build and promote social interchange while increasing collaboration between students (Alhabash & Ma, 2017). Facebook has become the preferred social network platform for high-school and college students (Manca & Grion, 2017; Toker & Baturay, 2019). Facebook social media usage among the students causes distraction and also affects their intelligence and

psychosocial wellbeing for example the fear of missing out which indirectly causes strain through many hours spent on Facebook and sometimes results in anxiety and low self-esteem (Kumar, Banik & Islam, 2019). Most of the students use Facebook social media for recreational purposes which sometimes affect their educational performances. Also, the many hours spent by high school and college students on Facebook for recreational purposes also decreases their cognitive, affective and educational development (Ernala et al., 2020).

Several researches have shown that social media use among students affects their wellbeing, including sleep and mental health (Garett, Liu & Young, 2018; Lin et al., 2021). Most students who spent many hours using social media for recreational purposes had poor academic behaviors, such as not completing homework and absence in class, lower self-efficacy and other problems affecting their academic work such as lack of sleep (Ibrahim et al., 2018).

Social media use has enormously affected the cognitive and affective ability of students in our contemporary society. Thus, this research is a conceptual discourse on the significance of Facebook social media in particular and its effect on the affective and cognitive development as well as the academic performance of the students in Abeokuta North Nigeria.

### **1.1 Statement of the Problem**

Students are recommended purposes to use social networking site like Facebook for educational purpose like sharing information about projects, assignments, lecture notes and engage in learning tasks. However, the use of Facebook among students has been drawn into social interaction rather than academic interaction or purpose. Also, the high amount of hours' students spent has led to the problem of Facebook addiction and decrease in academic performance.

Social media has increased the number of internet users among students in our contemporary high school which has caused a huge distraction on the students' cognitive and affective ability and affect students' educational performance and achievements. Several studies indicates that social media factors affect students' affective and cognitive growth (Turel & Serenko, 2020; Anders, 2018; Dalvi-Esfahani et al., 2021). Although the



introduction of social networking has rendered active engagement and collaboration among students feasible. Many students prefer to utilize the online social networking site for social interchange rather than for academic purpose. Family, researchers and educators have become quite concerned at the adverse impact of the number of hours most high-school students invest on a social networking site to distract and deviate from predetermined school targets (Datu et al., 2018).

The proliferation of the use of social media has influenced how adolescents socialise and learn. Thus, parent should strengthen relations with adolescents or teenagers (Alhabash & Ma, 2017) to encourage collaboration (Fan & Yost, 2019), and limit adverse effect of social media, such as cyberbullying (Sarwar et al., 2019) or poor writing skills (Akram & Kumar, 2017). Investigating the relationship between Facebook social media addiction and academic performance can help demonstrate how social networking affects students on an emotional and academic level. This study also demonstrate how Facebook social media affects the affective and cognitive development of students.

## **1.2 Aim of the Study**

This research aims to look at how Facebook Addiction influences the academic performance of the Abeokuta North secondary school students in Nigeria. This study will address the main research question:

1. How Does Facebook Addiction influence affective development, cognitive development and academic performance?

Also leading to the following sub research question:

- What is the relationship between Facebook addiction and affective development?
- What is the relationship between Facebook addiction and cognitive development?
- What is the relationship between Facebook addiction and academic performance?
- Are there any differences in Facebook addiction, affective development, cognitive development and academic performance according to gender?

- Are there any differences in Facebook addiction, affective development, cognitive development and academic performance according to high school level?
- Are there any differences in Facebook addiction, affective development, cognitive development and academic performance according to secondary school students' number of Facebook friends?
- Are there any differences in Facebook addiction, affective development, cognitive development and academic performance according to the number of daily hours' secondary school students spend using Facebook?

### **1.3 Significance of the Study**

The research literature concerning students and social media has emerged in different studies. Many studies address higher education student users of social networking sites (Hensby, 2017; Chugh & Ruhi, 2018), but fail to encompass other younger-age students. This study fills the gap in literature specifically addressing high school students and Facebook addiction. Most research addresses Facebook addiction and university students. Providing theoretical frameworks and considerations this study will translate to a younger demographic on the outcomes of Facebook addiction.

This research will show the social-cultural implication of the use of Facebook social media by showing that the Facebook social media will prevent students from engaging in academic activities. Since the advent of Facebook media, students prefer to spend much time socializing and engaging in online activities and conversation that will not increase their cognitive and affective development and also affects academic performance of students. Today's high school students are engulfed in social media (Chugh & Ruhi, 2018). Therefore, this study will help inform educators and parents about how social media influences students. This study will provide a knowledge base for those measures needed to address emerging concerns as well as using social media for the benefit of the educational system. Parents will have a better understanding of the causes and effect of Facebook addiction on adolescents. The study will add to the theoretical research as well as the studies that have been conducted with students.

## 1.4 Limitation of the Study

This study has the following limitations:

- The first limitation of this study is the generalizability of this study which focuses only one region in the country, more educational institutions in other regions will gain more stance of generalization.
- Second, if open questions were asked how they perceive their experience/feelings when engaged in Facebook activity, the study development might gain more from respondents' answer. The question should include open-ended questions so that the researchers are able to understand the participants more as they answer.

## 1.5 Definitions

**Social media:** Social media is a series of web-based apps that supports the creation and technological basis of Internet 2.0 and that enable user generated content to be created and shared (Kaplan & Haenlein 2010)

**Cognitive Development:** is the ability of a person to process information and acquire knowledge through the process of teach (Hagler et al., 2019).

**Affective Development:** Affective development is defined as the social emotional development of an individual which begins in infancy and develops throughout adolescence (Hao et al., 2021).

**Academic Performance:** According to Narad and Abdullah (2016), Academic performance means the development of knowledge that teachers evaluate in order to attain over a period through grades and/or training by the students and instructors.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter adopts related research work in past studies. In doing so, this chapter examines Facebook social media, affective development, cognitive development and academic performance among teenage secondary school students.

#### **2.1 Concept of Social Media**

According to Vannucci, Flannery, and Ohannessian (2017), "social networking" is a term that refers to a series of internet websites, services, and events that encourage collaboration, group building, engagement, and sharing. It is impossible to overstate the value of social media use by today's millennials. Social networking has increased in importance among second-cycle students over the years. It is how to develop relationships not just on campus, but also with colleagues that are not faculty members. For all of us, social networking may have a sense of belonging. Due to its and popularity, economists and academics are concerned that scholars' grades are being harmed as a result of the amount of time they spend on these activities (Van Den Eijnden et al., 2018). Berryman, Ferguson, and Negy (2018) estimate that approximately 57% of social network users are between the ages of 18 and 29, but maintain a private profile on multiple social networking sites.

Social networking and adolescence seem to be inextricably related these days. It is uncommon to see a teenager without a cell phone or access to a social networking platform. Adolescents now have recourse to historically unavailable interactions and challenges. Oftentimes, parents will have to solicit help from their children in setting up a

smartphone or creating a social networking platform. This is because adolescents have grown up with technology, while the family is inexperienced with technology. Children are people of the digital world, while their parents are digital refugees (Vogel et al., 2021). Adolescents grow up in a technological revolution, while senior citizens absorbed aspects of emerging technologies into their lives and struggled to adapt to their new life (O'Reilly et al., 2018). A new impediment has arisen between the two cultures in the shape of a "language split." This would make it more difficult for parents to determine what is and is not suitable in terms of television and technical use (Weinstein, 2018).

Academics and physicians must stay current about the positives and disadvantages of television use and technology for parents to understand both the long - term and short implications. It would seem that the 'internet settlers' are adapting, but they simply do not have a choice (Durak, 2018). For the far future, technology will continue to evolve, and citizens will need to adapt. Adolescent social networking use is focused around a single common goal: staying connected at all stages (Anderson & Jiang, 2018). With the advent of social networking, conversation underwent a complete transformation. Individuals can use social media to stay in touch with friends, make plans, meet new people, and introduce themselves to the world (Rezaei & Meshkatiyan, 2017).

Eleuteri, Saladino, and Verrastro (2017) discovered that 73% of all adolescents utilize social media. They also assume that this is an underestimate. Although social media seems to be a brilliant invention, its constant use and psychological damage make it dangerous to use. On average, children between the ages of 11 and 18 spend more than 11 hours a day interacting with interactive technology (Orben, 2020). Social networking can obstruct solo activities and even compete with existing face-to-face personal interactions. For instance, social networking often delays study and review, potentially impairing the child's work's quality. Adolescence is a stage of self-discovery, experimentation with new social skills, and the formation of values and relationships (Young et al., 2017).

Although social networking will undoubtedly promote certain critical aspects of youth development, it also exposes teenagers to undesirable outcomes (Radovic et al., 2017).

## **2.2 Facebook Social Media**

Facebook nowadays became a global phenomenon (Kim & Yang, 2017). It is widely accepted by people globally; using it for many different reasons including social and business reasons. Facebook provides several features for its users such as chatting, groups, private messaging, and wall posts, among others to keep in touch with family, friends, and world happenings (Shiau et al., 2018). As for business reasons, many organizations, companies, and institutions adopted Facebook to promote their businesses among the target population. Facebook is a popular and preferred tool for keeping in touch among students (Salloum et al., 2017; Pegoraro et al., 2017).

The number of Facebook users is overwhelmingly increasing. As of 2019, Facebook users reached more than one billion around the globe, and approximately 80 percent of those users live outside the United States of America and Canada (Burita, 2019). It was also reported that there were more than 800 million active users who were using the site daily as of 2020 (Ribeiro et al., 2020). In terms of Nigerian teenagers' engagement, there is a huge presence in Nigeria in the most popular social networking site, Facebook (Bello, 2020).

## **2.3 Facebook and Education**

Social media (e.g. Facebook) is a content exchange and knowledge generation and is of tremendous importance in the higher education sense. In the world of education and student life, social networking plays an important role (Manca, 2020). Access to databases, information and communication through social networking is simpler and more convenient. Teachers and students are linked and can use social networking sites to help their educational activities (Khozali & Karpudewan, 2020). Teachers extend their use of social media to hold live seminars, give off-hour assistance or even host discussions for students. Social networking lets educators relate to both their off-campus pupils and their former students. Teachers utilize social media to educate by building communities and identities for students who have links to the content. Teachers will exchange suggestions and point them out to Facebook pupils.

Teacher educators build hashtags that enable students to tag their instructional posts and display posts and see what the group created (Su & Chen, 2020). One of the key factors for adapting teachers to social networks in schools is because they will educate the students via social networking. Not only do they simplify the job, but they also professionally establish and make a group identity for them (Çakiroglu, Atabay & Aydin, 2020). Facebook is an indicator of teachers doing an excellent job. This social networking site is easily accessible and can also help instructors get their profession's strong credibility (Almohtadi & Aldarabah, 2021).

Social media is the missing piece in the admissions, inspection, public relations and student services puzzle which aims to reach your audiences via Facebook (Chan & Leung, 2020). Social networking is incorporated into classroom instruction as widely as possible in any high school college and university including enrollment, campus life, and student relationships. In addition, at any point students and teachers work closely with social media (Wongsa & Son, 2020). Should academics fail to use social media, several future audiences are driven away. It can prove very useful in high school education (Bett & Makewa, 2020).

#### **2.4 Facebook in Teaching and Learning**

Social networking, such as Facebook, is used to teach students from other groups and perhaps from beyond, such as students of the same subjects and subject experts, for easy correspondence (Manca, 2020). It is important to look at the risk of transparency and the necessity for continuous contact with students to answer academic questions and the challenges with the use of social networking as they emerge. The reality that social media are available to the world (Zarzour et al., 2020). The scholarly advantages of free dialogue and academic discourse in genuine online contexts counterbalance these threats. A modern field of social media is becoming more common among students outside of school.

The benefits of using social media to educate are wide-reaching (Giannikas, 2020). Research showed that the usage of social networking technologies increased learning experiences for the pupil, enabled the student to communicate beyond the classroom in a real-time way (Liljekvist et al., 2020). Students may also view videos with educational

relevance or share information about what they have seen and heard and then enter online to talk more with professors. During social networking interactions, even teachers may benefit from pupils. Similarly, when listening, reflecting, communicating, interacting and summarizing, an instructor will supervise pupils. Social networking offers a platform anywhere they can reach instructors and colleagues, giving them the freedom to prolong their working hours (Chaka & Govender, 2020). Facebook features also encourage pupils to participate in social and innovative learning advances outside standard schools and organizations.

## **2.5 Facebook use and School Connectedness**

School connectedness is critical for the well-being and learning of all young people (Muls et al., 2020). Adolescents often attach more importance to their schooling as they have a greater sense of school membership. Research findings have found that school pupils are more likely to experience a range of good well-being and academic results (Somers et al., 2020; Abbasi et al., 2021). School interaction has since shown to be a vital element in preventing behaviour in young people's wellbeing, including school bullying and suicide (Garwood & Moore, 2021). Though researchers are beginning to investigate the usage of social media for educational purposes (Vikneswaran & Krish, 2016), the possible impact of SMUs on the connection and academy output of schools among young people are scarce in study studies. The growing acceptance of social networking, their addictive existence (Kuss and Griffiths, 2017), and various behaviors' correlated with their use, can, however, hinder socialization and hamper school connections (Sampasa-Kanyinga & Hamilton, 2018). Though this is not the subject of our article, the current research is based on the connection between common and problematic internet usage and social and school links (Liu et al., 2020).

The findings of these researchers have shown that difficult internet usage impedes face-to-face and school connections. For instance, Carney et al. (2020) noted that increased usage of the internet (main of communication) was linked to decreases, a decrease in the size of their social circles and a rise in dissatisfaction and isolation among participant communications in households. Studies have shown that high levels of school connectivity protect the emergence of issue internet usage by teenagers (Carrington et



al., 2021; Klinck et al., 2020). Therefore, strong usage of social network may be predicted to result in poorer school connectedness for young people. However, in a broad representative sample of middle and high school students, no research has studied the association between usage of social media and school connectedness.

## **2.6 Facebook Addiction among Adolescents**

The web is a single Internet service, and Facebook addiction is not a recent concept. Previous research centred on the characteristics of internet dependence between various populations (Sayeed et al., 2020). However, the Facebook addiction and its predictors are relatively unknown from the U&G viewpoint. Young adults use social networking sites (SNS), in particular Facebook, more frequently (Badenes-Ribera et al., 2019). Pontes et al. (2018) showed that traits of personality such as extroversion and knowledge of themselves and self-esteem forecast both the period spent using SNS and the addiction to SNS. In addition, traits of personality have been found to influence student Facebook use (Atroszko et al., 2018).

In this research, excessive use of Facebook was found to affect their academic performance, particularly among students with extroverted personalities. In the literature, there was no reference to the idea of Facebook addiction (Fowler et al., 2020). Facebook addictions, such as contact, time passing, social networking, entertainment and companionship have a strong association with Facebook (Marino et al. 2018). Among these reasons, the predictors of Facebook addiction among high school female students have only passed their period, entertainment and contact. Balcerowska et al (2020) found a strong and meaningful correlation between Facebook addiction and adolescence, abstinence on Facebook, as well as two forms of personality features such as neuroticism and extroversion.

A study showed, though, that Facebook addiction was the best indicator of neuroticism. Facebook adhesion between teacher candidates in Turkey was studied by Cam and Isbulan (2012). They noticed a gender difference in Facebook addiction and disparities in age. Males are more web addicted than women. The result of this study also revealed that male students are more affected than female student by Facebook addiction. In addition, the elderly were more addicted to the place than the young, sophomore and

freshmen. In their research, the IAT scale of Young was modified to assess Facebook addiction (Internet Addiction Test). Bergen Facebook addiction scale (BFAS) was created by Andreassen et.al (2012) in further analysis BFAS was focused on prior scales of addiction, originally consisting of 18 elements of six measurements, including tolerance, removal, hypothesis, war, recurrence, and altered mood.

Six elements that reflected such dimension were included in the final model of BFAS. The measure was associated with other dimensions, including the Facebook mood scale, the online socio-energy scale, and addictive trends. The BFAS demonstrated positive psychometric characteristics and therefore considered a true and accurate FB measurement tool. Facebook social media encouraged people to take part in several events such as games, gaming, video and movies streaming, profile updates or message mates. Therefore, Settanni et al. (2018) indicated that FB dependence is not associated with social networking dependence. Previous reports are not on the reasons and the impact they have made on Facebook. Few research centres on the U&G and media dependence hypotheses.

These reasons are included. For example, Alabi (2013), who created the Facebook addiction symptoms scale (FASS) based on the Young IAT scale, discovered that Nigerian university students were low Facebook addicts' relative to students from private universities (84 per cent) Lower Facebook addicts (69 percent). In addition, the research by Alabi indicated that students from private academia are more inclined than students in public universities to be site-sufficient. While the analysis by Alabi was focused on the hypothesis of these, it does not explicitly state the reasons for the use of the platform nor the site dependence.

Raza et al. (2020) used the U&G hypothesis and identified five key reasons for utilizing Facebook: time, social networking, communication, fellowship and entertainment. These reasons were attributed positively to FB dependence. However, FB's addiction was expected only for three reasons adding up to a total of 24 percent. Likewise, the Internet has been projected by Annamalai et al. (2019). The three dimensions of Internet addiction, namely interference, fugitive fact and connection, is anticipated by motives for

utilizing the Internet like usual amusement, escape, care for others, cost-effective knowledge searching, power and excitation.

## **2.7 Implications of Facebook Addiction**

There is limited research over the health effects of media consumption (Pontes et al., 2018). However, researchers must still keep on updating our methods, as scientists and professionals, to consider its effect on the health of adolescents, as Facebook and behaviors continue to develop. Facebook social networking sites make unique improvements in how we invest our time, but also crucially, as compared with other types of technology or mass media. Facilitating interaction through the day and alongside other events, Facebook is readily accessible via mobile applications and specially built to keep consumers involved, with continuous reports and no well-specified endpoints (Kanat-Maymon et al., 2018).

Most importantly, Facebook offers rich resources for social networking, which allows individuals to carefully view themselves through public accounts, measure peer approvals through numerous likes and feedback sessions, and expand face-to-face day-by-day experiences through 24/24 and community messaging accessible (Su & Chan, 2017). Together they add not only more time to social media use but also to evolving social standards about the expected availability, and the urgency of online interactions, with unique implications for the well-being of young people. Such implications lead to anxiety, sleep loss, depression, self-harm and even loneliness (Saeed Abbasi, 2018; Al Mamun & Griffiths, 2019; Satici, 2019).

### **2.7.1 Loneliness**

People are social creatures that want to be in touch with others; when people are alone in real life, there is a need for communication and social networking sites such as Facebook make contact simple to minimize social, familial and/or romantic solitude (Satici, 2019). Shettar et al. (2017) claim that people on their own are spending more hours each day on Facebook, making this population more vulnerable to addiction on Facebook. On the other hand, the more people invest time using the Internet and

Facebook, the more contacts they lose in their social environment (Uram & Skalski, 2020).

In addition, social isolation is linked to similarities in solitude; passive Facebook involvement in a Phu and Gow (2019) research is in positive relation to alienation and social loneliness, where Facebook's successful social interventions are negatively linked to solitude and social loneliness. For clarity, passive and active characteristics were determined by factor analysis and three loneliness sub factors were evaluated by the researchers. Other attributes such as social contact in real-time and news & facts add to the salacity of the family. It is presumed that loneliness is an indicator of Facebook addiction.

### **2.7.2 Sleep-Loss**

Sleep Loss is a common term for a condition of poor sleep quantity or sleeping quality, including sleeplessness or unwanted sleeping conditions and circadian sleeping arrhythmias (Simon et al., 2020).

Based on social networking perspectives within a context of technology use, sleep analysis has investigated how time, length and pacing of the social media activities of individuals contribute to their sleep results (Brailovskaia et al., 2018). These studies also confirmed the connection between higher social media use and less sleep, including reduced sleep, subsequent sleep periods and lower quality of sleep (Przepiorka & Blachnio, 2020). The timing of usage is extremely important for sleep since social network use at bedtime is an important indicator of worse sleep results, regardless of total use (Hwang, 2017).

These results correspond to a process for sleep displacement, as the time dedicated to any task is only 24 hours a day, and one hour is spent awake on social media. It should however be noted that researchers are mostly cross-sectional.

To consider the usage of social networking as an activity that may displace sleeping, this experience obtained from the pace, length and time (Boumediene et al., 2020). However, it is important to note that conceptualizing the usage of the social network in minutes and hours is just part of the image to inform clinical practice and broader policy meaningfully.

To prevent oversimplification of policy and procedure, which reduces "social media use" from a diverse array of experiences and social connections into limited experiences. It is crucial to understand the broader background around this time spent using social media represented only in hours per day.

In the last five years, there has been a field of growth in sleep literature and further research examines not just the time people use social media but their experience of and reasons for these encounters (Juergensen & Leckfor, 2019). Thus the new perception of processes connecting the usage of social media with sleep has strengthened alongside the physiological dimension (actual social media activity) concerning social, emotional and cognitive aspects of user interactions.

For example, persons who spend the same time every day or at night utilizing social networking may differ their emotional link to this activity (Dogan et al., 2019). Young people frequently experience feelings of disconnect and lack of connection to social media and tend to hold their phones near at night. This has consequences for sleep results, as heavily invested consumers show lower sleep quality and it could be harder to break off from social networking throughout the night. This highlights the need to understand social media usage in the wider sense of online and offline social experiences as a strong link with social media sites could derive from a wider fear of possible failure (Aslan, 2020).

This intrinsic fear of absence was related to a shorter sleep period by behavior and cognitive pathway (Khattak et al., 2017). Thus, people who are worried that they might be missing will fight to avoid the use of social media but also to reflect on future social media experiences at bedtime. This is often driven by worries over fulfilling perceived societal demands for 24-hour internet access and timely reactions, which may also improve social network interaction at bedtime and also increase cognitive excitement even if disconnected.

These findings establish a more detailed view of the sleep consequences of this inherently social and immersive experience based on probable mechanisms which are important for all types of technological use, including enhanced cognitive excitement at bedtime. For example, this cognitive viewpoint will guide realistic ways to promote a

healthier equilibrium between usage and sleep in social media. In addition to apparent behaviors, the cognitive perspective can consider deeper issues (Alimoradi et al., 2019). This suggests to physicians, educators, and teenage parents that it is not only difficult to incorporate but does not resolve other causes, such as underlying issues and excitement, which remain independent of real social media activity, that concentrate exclusively on night-time reduction in social media activity (Wong et al., 2020).

### **2.7.3 Depression**

Depression induces sadness and/or a lack of confidence in past hobbies. This will result in a range of mental and physical challenges and reduce the working and home skills (Lim et al., 2018).

Depression and addiction are well-known terms similar to one another in current literature. For example, Brailovskaia et al. (2019) have shown that increased internet usage (communication) is linked to depression levels. Depression is often linked to problematic online activity (Hussain et al., 2019). It can also be pointed out that growing usage of the web in conjunction with higher depression indicates that excessive consumers are more likely to be stressed in conversation.

Finally, the rate of distress among the site abusers were greatest in a survey in which groups are split into dependent people and none were addicts. Shetter et al. (2019) sought to find a connection between Facebook usage and depression, however the connection was not verified. Alzougool (2018) found symptoms of depression through Facebook status updates that encourage users to communicate on Facebook that can cause Facebook addiction.

### **2.7.4 Anxiety**

Anxiety is a sense of fear, dread and discomfort. The response to stress and addiction may be natural. Recent studies have shown that the use of social networking platforms including Facebook, can raise stress levels, cause fear and harm a person's self (Xie & Karan, 2019). This may also lead an individual to develop or intensify an underlying mental health condition. The researchers tested technological concerns around Facebook. The concept of Facebook fear derives from studies by Atrozko et al. (2018).

Facebook Fear is labelled technology-related anxiety. To prevent ambiguity, Facebook fear is not just being frightened of using the network, but the fear that Facebook will not be used when you want, and the fear that the details will be missed online. This variable exhibits similarity to FOMO (Fear of Missing Out) from Dempsey et al. (2019). Facebook users are afraid that something or someone may be lost here. They feel that it is more fascinating what happens on Facebook than what happens offline; for example, interrupting interactions face to face. It is also fair to assume that the ability to use Facebook would lead to higher addiction to Facebook, not to forget something.

### **2.7.5 Self-Harm**

Young people share online thoughts of suicide and self-harm, including videos of self-inflicted injury. Explicit representation of self-injury on social media cutting resulting to self-injurious behavior occurs among young people, as shown by the research by Vaschishtha, Ahuja & Scharma, M. (2017). The responses of the viewers which usually had constructive input or personal revelations on experiences of self-injury were of specific concern and seldom had incentives or discussions on rehabilitation.

These studies demonstrate the ability to romanticize and normalize self-harm by youth. A systemic analysis (with the use of qualitative, analytical or cross-sectional methods) showed that the social networking sites contained standardization of self-harm compartments, debates on practical questions relating to suicides and live representations of self-harm. There have also been encouraging factors, such as a sense of belonging, recommendations for therapy and tips on avoiding self-harm (Rashid et al., 2019).

### **2.8 Academic Achievement**

Academic achievement plays an important role in a child or adolescent growth, as academic ability, particularly in reading and mathematics, affects many results, including achievement in schooling, success and job income, physical and mental wellbeing and life (Calvin et al., 2017; Wrulich et al., 2014). In several study projects over the past decades, it is not uncommon to see variables related to academic success and how these

factors may be incorporated teaching to enhance academic results (Stockard, Wood, Coughlin, & Khoury, 2018).

Two main categories essential for academic advancement have been established by Stockard et al. (2018) research: Firstly, several core field-specific competencies. The ability to interpret and understand words is critically influenced by meta-linguistic skills (for instance, phonological processing, spelt, Morphology), fluency and understanding techniques, as well as numerical abilities such as numerical meaning and truth recovery.

The other key to academic achievement is cognitive and affective ability, including but not limited to the working memory (simultaneous storage and manipulation of information), thinking (complex problem-solving capacity) and executive functions (Sternberg, Kaufman, & Grigorenko, 2018; Peng et al., 2018).

### **2.8.1 Facebook Social media and Affective/Cognitive development**

Academic success in adolescence can be very individualistic as some aim for the highest results and some only-hope for decent enough grades. Because young people think more abstractly than logically, it becomes increasingly difficult for them to perform a job. Social networking will hinder the learning of a teenager and influence his or her academic achievement. In comparison with other factors, including psychological well-being, there is little study on the consequences of social media on academia performance. This is mostly because social networks were only recently open to teenagers. Furthermore, there are contradictory reports from surveys.

There is also a need for further study on the function of social media in the academic development of children (Ahn, 2011). Karpinsky (2009), in Ahn (2011), argues that Facebook customers have a lower GPA than non-user students. The study was a fundamental and exploratory effort to recognize the impact of social media on learning and academic achievement (Ahn, 2011). Researchers, for example, Pasek, More and Hargittai (2009) acknowledged that any information they gathered on Facebook does not have an important connection to GPA.

Technology is rooted in education, studies may concentrate on positive impacts on performance rather than negative ones, (Ahn, 2011). Researchers examined the usage



of social networking and university performance in young people in one survey and also linked the two to loneliness. Research by Neto, Golz, and Polega (2015) carried out among 345 students at the urban high school, aimed to equate social network use with GPA. Researchers stress that the relationship between academic performance and adolescent usage of social media remains uncertain. Correlation testing among university students and has shown a negative association between the two variables.

Neto et al. (2015) suggests that GPA of students, and the use of the social media is related. All their results did not correspond to prior research, which they observed the lack of ties between GPA and the usage of social media. There are significant variations in caste, age and culture, as noted in the report. Women have recorded more loneliness and regulated social networking than men, 9th graders have recorded higher GPAs, and African Americans have reported higher GPAs than Latinos. Research on student success in the use of social media of adolescence is limited.

For college students, there are more study available than high school students. The social network registration of kids at a younger age is carried out in Koutamanis et al. (2015) research where 785 teens are surveyed and investigated the level of derogatory online comments by the adolescents. The research observed that the most likely negative reviews were for teens identified as having a more-risky online behaviour. They also made a distinction between male and female. Age was linked to increased online social exploration, leading to further negative reviews, however the links between age and unsafe online appearance such as pictures of alcoholic beverage consumption or smoking was not established. Koutamanis et al. (2015) conclude that their analysis contributes to the increasing range of studies and findings related to Internet usage and adverse feedback while stressing the importance of concentrating on conduct and other particular factors that could contribute to adolescent negative feedbacks.

Bad reinforcement and victimization are among the negative impact on the social cognitive wellbeing of a young person. Research-based on the interrelated position of mainstream media and social media in the creation of an objective self-concept by adolescents was conducted by Vandenbazch and Eggermont (2016). They also examined body monitoring through social websites and asked the participants how much

they compare looks and how often they think about how individuals look at other people. The researchers discussed how often they look at others. The object theory indicates that people who encounter and/or perceive situations where the body is valued in favor of others can start to see their worth from this point of view (Vandenbosch & Eggermont, 2016). In some cases, young people can internalize the expectations they see, so that there can be a more self-objection.

Objectification can be facilitated by social media because most photographs on networking websites relate sexual appeal to body characteristics. These characteristics include weight, sexual attractiveness, facial appearance, muscle tone and specific measurements. The influence of social media and social network sites of self-conception was studied by Vandenbosch and Eggermont (2016). Researchers have identified a connection with sexualizing social media in longitudinal analysis. The way people see themselves changes because of social media, particularly when it is sexualized (Vandenbosch & Eggermont, 2016). Adolescents are taught to use social networks for seeing others as objects rather than as persons. This leads to objectification of others and the self.

### **2.8.2 Facebook Social Media and Academic Performance**

Media and social networks are technical instruments used to enhance collaboration, share learning, and artistic speech in colleges and institutions of higher education (Dabbagh and Reo 2011). In the social sciences and school programs in general, these networks play a significant role in scientific progress. Many surveys have been carried out focusing on multiple facets of social networking at different educational and social levels. These results involve openness to the topic matter, general intelligence, and analytical thought acquisition in colleges, moral growth, political engagement, and psychological maturity (Pascarella and Terenzini 2005).

The effects of social media's on academic performance and its use as an educational tool for the improvement of students' academic performance at Malaysian Technology University have shown that social media influences participatory learning positively and there is an important connection between the participation of peers and supervisors (Al-Rahmi et al. 2014).

Research on the connection between Facebook usage and academic success has been restricted. For example, in students with low GPA, Awing et al (2017) noticed that heavy use of Facebook is observed. Turel and Serenko (2020) and Faelens et al. (2019) reports on the research of the same data, examining whether higher Facebook levels can be linked to a decrease in college student academic success. The research observed a bad partnership in a selection of undergraduate and graduate students between Facebook usage and self-reported GPA metrics and weekly studies. The research observed that students spend no time on the Internet, and, contrary to facts, students concluded that Facebook time did not influence their academic success. The findings of the report have led to a media frenzy and to recommend that Facebook administrators should be alerted to find ways of limiting access to improve academic success. Turel and Serenko (2020) recognize that their work has many shortcomings and call for more systematic experiments utilizing other analytical approaches such as regression and structural equation simulation. Busalim et al. (2019) confirmed that Facebook usage and academic success have no connection. The study was not reflective of the university students at large, the measure of usage was skewed and the analyses did not take control variables into account, and NaqShbandi et al. (2017) criticize earlier experiments for finding a negative connection between Facebook and GPA.

## **2.9 Facebook Social Media and Nigeria**

In the field of knowledge and connectivity, social networks are becoming strong. It has without question changed the traditional way of collecting and disseminating news, which confirms what seems to be a paradigm shift from printing to broadcast. In Nigeria that year, social networking played a pillar of knowledge and contact. All began on New Year's Day with the end of fuel subsidies (Kola & Sunday, 2018). The immense network strength was shown by this incident. About a week in social networks daily protests were coordinated and maintained. In this scenario the position of the social network is overwhelming because it began and finished with Facebook (Sule, 2018).

Social networks have proven themselves to be instruments of government and arms for offenders. Social Networking Sites (SNS) have been popular among millions of people on the Internet since 2002 (Boyd & Ellison, 2007). While few have received international

recognition and interest, the Federal Investigative Bureau reported that over 200 outlets for social networking are in operation (Duven & Timm, 2008).

About 400 million users are involved with websites like Facebook regularly (Duven & Timm, 2008). Any individual who becomes a member of an SNS will be allowed to build a site or profile that reflects the personality of that person (Asogwa (2017)). Individuals can create a complete social network based on your interests by using this personal profile (Boyd & Ellison, 2007). The concept behind much of this phenomena is to make people feel emotionally linked and part of a society, (Coyle & Vaughn, 2008). Participants may link to other persons via education, job or organization they know or encounter strangers from all over the globe (Asogwa (2017)). They do this by looking for and incorporating "mates," so that they can exchange knowledge with them and other networks to which those individuals can belong (Boyd & Ellison, 2007). "Family" in the SNS universe merely implies the connection between two profiles (Asogwa (2017)). This in turn significantly extends the network of an individual to reach more participants and exchange knowledge with them (Coyle & Vaughn, 2008).

Moreover, being a friend of someone on the SNS lets someone connect in a wide range of ways, including sending private and public messages, taking part in online activities, posting on shared images, exchanging music or film tastes, reacting to journal entries and many more (Livingstone, 2008). One author believes that "the development and networking of online material becomes an essential way of managing one's personality, lifestyle and social relationships" (Livingstone, 2008, 394). A button press could imply loss of friendship and a friendship with someone who's not a "true-life acquaintance" maybe a friend in the SNS (Livingstone, 2008). While there are many "privacy" solutions available on these pages, analysis has shown that more engage in and partake in knowledge publicity (Duven & Timm, 2008). Data protection has a new meaning in the context of social networking platforms, where a participant only has to provide an individual with some personal details (Duven & Timm, 2008).

Some pages, such as Facebook, began to ban university students and needed an "Edu" mail address for registration (Asogwa, 2017). This website is now available to all users and expands the number of people with two accounts: one for private usage and one for

commercial or educational use (Asogwa, 2017). It is important to remember that when we understand why these sites appeal to so many people, any SNS concentrates on social recreation (Asogwa, 2017). Any individual who enters the SNS must pick an image that will be used as a representation of himself on his profile (Barker, 2009). Some people choose an updated version of their face or a picture of a group of mates, while others prefer to reflect a new image or value (Barker, 2009).

This image is essential in every respect when viewing an SNS since it illustrates how someone wants to be viewed by others (Barker, 2009). The social status of SNS often plays a very important role in the way each person is treated by others on his or her profile (Asogwa (2017). Most SNS shows how many “friends” an individual has and how many people have just written to him (Tufecki, 2008). Therefore, many SNS representatives would look for connecting individuals even though they do not want to be connected to particular people (Asogwa (2017). Adolescents and students want a lot of friends because they are concerned with what people would say if they didn't have as many friends as their peers (Barker, 2009). It does not only help to gain recognition but it also is interesting to choose the right pictures to share (Siibak, 2009).

According to a new survey conducted on visual impression management and social networking platforms, almost 60 percent of teens spent more time choosing images to share than engaging with others (Siibak, 2009). That demonstrates that these SNSs are used to create youth identities not just to stay in contact with peers and new people. They are mostly used by teenagers and young adults on social networking sites.

## **2.10 Theoretical Framework**

This study explores two theories (i.e., Stressor-strain-outcome model and User gratification theory) explaining the relationship between Facebook Social media, cognitive and affective development and academic performance.

### **2.10.1 Stressor–strain–outcome model**

The stressor-strain-outcome model is a paradigm for stress analysis and was effectively implemented in previous studies (Cheung & Tang, 2010; Choi, Kim, Lee, & Lee, 2014). The social web can be used for creating and keeping social links, exchanging knowledge,

connectivity, and entertainment by combining user-generated content with social networking functionality. Social applications will, in general, subject university students to information, repetitive contact and social demands, such as pop-up alerts and push notification, multipurpose functions, and features of self-disclosure. As the requirements for use overcome students' processing skills, they can feel overwhelmed and feel a sense of losing charge of circumstances, leading to diverse kinds of social network overload.

These challenging environments influence the mental health of the students more and reduce their academic performance

Students' academic success, which may be adversely impacted due to inadequate study time and resources, is a key result of behavioral stresses caused by social media use in the school setting. The stressor-to-train result model is thus an important solution to the linkage between specific stressors (social network overload) and outcomes (cognitive growth, affective development, and academic performance), thereby highlighting the detrimental impact of environmental stimulus in influencing students' internal conditions and external behavior.

### **2.10.2 Uses and Gratifications Theory**

A scientific basis for the present research is the Use and Gratification theory (U&G). The U&G has a lengthy history of exploring the wishes and reasons of users for media use. The principle is ideally suited to the analysis of emerging media technology (Ebersole, 2000). Ruggiero (2000) claims that the method of U&G is helpful in the internet examination by claiming that the internet has three special features which do not exist in conventional media. Interactivity, asynchronously and demassification are certain features. Whereas in previous experiments in the 1940s and 1950s the assumptions of this theory were identified, the first use of U&G was documented in a paper by Elihu Katz (1959). He answered Berelson, who said the mass communication industry was dying. Katz (1959) concluded that if we center attention on "what people do with the media" rather than "what do the media do with the people," the industry will thrive.

This principle is thus called a user-oriented method. The hypothesis suggests that some emotional and therapeutic desires are satisfied in the media. Katz, Gurevitch, and Haas (1973) found 35 media needs to be fulfilled by analyzing the literature. These requirements are divided into five main categories: cognitive needs, emotional needs, integrative needs, self-integrative needs, social inclusion needs and conflict relief needs. The U&G strategy is concerned with the following: Katz, Blumler, and Gurevitch (1974) argued that social and psychological roots give rise to the perceptions of the news media or other outlets, leading to various habits of reporting to the media or involvement in other events.

Katz et.al (1974) submitted several theory assumptions. The first premise is that the viewers are active consumers and vary as passive consumer from previous media outlet. Secondly, the viewer may decide the connection between satisfaction of need and the preference of the media. Thirdly, there is media rivalry for other reward outlets. Fourthly, because they are mindful of their desires and motivations, data are extracted from audience participants by self-reporting questionnaires. Fifth, there is no encouragement of cultural judgment, the audience is studied for its purposes. The idea was used in conventional media such as TV, radio and newspapers but was later broadened to digital media technologies by scholars. Kaye (1998) has found six reasons for utilizing the Internet, including entertainment, knowledge search, social communication, and time spent, escaping and web preferences, using the UN&EG method in the sense of World Wide Web.

Five reasons for internet users were also noticed by Papacharissi and Rubin (2007): personal services, search for details, time to spend, entertainment and convenience. Roy (2007) noticed 8 ways to utilize the Internet, in particular user-friendly, convenient communications, self-development, broad visibility, schooling, global trade, relaxing and self-development. As far as Facebook is concerned, many reasons have been identified to use the website (Shahnaz 2011); for the preservation of relationships, entertainment, trend-following/crowding, expressiveness emotional, expansion of the social network and pleasant (Hew & Cheung, 2012). Sheldon (2008) found six reasons for visiting Facebook,

including preservation of connections, the social world, time spent, friendliness, entertainment and companionship.

The sum of time spent on Facebook by student was forecasted to be associated with entertainment and friendship management (Hunt, Aktin & Krishnan, 2012). Nine motives for use in Facebook have been identified by Smock, Ellison, Lamp, and Wohn (2011). These involve usual time for leisure, relaxation, companionship, escape, career development, social networking, cool and trendy trends, new people and articulate exchange of knowledge. Among these reasons is the expected status alerts function that articulate knowledge exchange provides. Commentary function anticipated relaxing entertainment, social engagement and compassion. However, the most frequent reasons for internet motives, particularly Facebook motives, were entertainment and passing time.

### **2.11 Related Studies**

Many studies have investigated the impact of Facebook addiction on affective development, cognitive development and academic performance.

Ainin et al. (2015) reveal that Facebook excess usage affects students in terms of welfare, fitness, mental growth, joint learning, self-esteem, academic achievement and performance. Alwagait et al. (2015) also confirms this results based on parameters such as how much time social media used which affect performance and success. For college students, there are more studies available than high school students, and it is worth mentioning. The study of Koutamanis et al. (2015) uses 785 teens survey to investigate the relationship between social networking addiction and affective development. They observed that teens identified as having a riskier online behavior as a result of their addiction with social media. Age was also linked to increased online social addiction, leading to further negative reviews, however the links between age and unsafe online appearance such as pictures while beverage or smoking was not established. Koutamanis et al. (2015) conclude that their analysis contributes to the increasing range of studies and findings related to Internet usage and adverse feedback while stressing the importance of concentrating on conduct and other particular factors that could contribute to adolescent negative behavior. Kirschner and Karpinski (2010) find that social network users had lower GPAs and studied fewer hours a week than nonusers. Facebook



addiction can affect a person's communication skills, and emotions leading to mood swing and other disturbing behaviors (Karr-Wisniewski & Lu, 2010; Maier, Laumer, Eckhardt, & Weitzel, 2015). Maier, Laumer, Eckhardt, & Weitzel (2015) investigated social networking addiction and affective development. Exhaustion is the involuntary and unpleasant behavioral reaction of people to harsh atmospheric stimulus (Maier et al., 2015). Excessive use of social networking will provide unwanted outcomes from the point of view of affective development. Mehmood and Taswir (2013) reviewed and noticed that undergraduate students use social networks for scientific purposes and less for recreational activities, and a significant number consider it as a means to find knowledge, to enter educational networks and find career opportunities.

Moreover, Steelman & Soror (2017) indicates that social networking addiction can lead to affective development of technostress and exhaustion a psychiatric condition that may affect the behavioral ability of a person (Steeleman & Soror, 2017). Technostress is regarded as the individual's mental condition as they cannot satisfy current demands originating from the use of social media (Steeleman & Soror, 2017). Santrock (2015) investigated how social networking addiction could influence cognitive growth in adolescence. From 11 to 19 years of age, teenagers grow a thinking capacity that opens up new cognitive and social horizons. Santrock (2015) points out that young people should reason more abstractly, idealistically and logically so that learning can be improved. Social networking may harm young people's cognitive growth, and university performance is one of the ways that may be hampered.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter will explain the methodology followed for the study. The chapter consists of several sections including research design, sampling method, data collection, measurement, participants and data analysis.

#### **3.1 Research Design**

This study has a quantitative research design. Correlational research model was employed in the study. Correlational research model is used to look for relationships between variables, and it enables predicting future patterns based on present knowledge (Asamoah, 2014). This research aims to look at how Facebook social media affects affective development, cognitive development and academic performance of the Abeokuta North senior secondary school students in Nigeria.

#### **3.2 Population and Sample**

A sample size will be generated from using fisher's sampling formula (Araoye, 2003). The population of this study is secondary school students in Abeokuta region of Nigeria. Where population size is above 10,000, standard deviate is usually set at 1.96 which corresponds to the 95% confidence level. The proportion in the target population estimated to have a particular characteristic; since there is no reasonable estimate, 50% is used (i.e., 0.50). Thus the sample size for this study is 384 students in Abeokuta region of Nigeria. The questionnaire will be distributed to respondents in designated secondary schools in north Abeokuta region of Nigeria. The research adopts convenience sampling technique. Convenience sampling is a method of sampling in which the first usable

primary data source can be used for testing purposes without objective conditions (Etikan, Musa & Alkassim, 2016).

**Table 1:**  
*Descriptive Statistic*

<b>Variables</b>	<b>Demographic Information</b>	<b>N</b>	<b>Percent</b>
<i>Gender</i>	Female	113	48.7
	Male	119	51.3
<i>Age Range</i>	10 -13	63	27.2
	14 – 17	144	62.1
	18 – above	25	10.8
<i>High School Level</i>	JSS1	16	6.9
	JSS2	23	9.9
	JSS3	33	14.2
	SS1	43	18.5
	SS2	65	28.0
	SS3	52	22.4
<i>Number of Facebook Friends</i>	1-149	29	12.5
	150-299	28	12.1
	300-499	40	17.2
	500 & above	135	58.2
<i>Daily Hours</i>	10hrs & above	36	15.5
	3 & below	82	35.3

<i>Spent on</i>	4-6hrs	56	24.1
<i>Facebook</i>	7-9hrs	58	25.0

Table 1 indicates that males were 51.3 percent while females were 48.7 percent. These reveal that in this study there were more male than female. The table also shows that 62.1% of respondents were between 14 and 17 years of age. 27.2% of respondents were between 10 to 13 years of age and 10.8% of the respondents are over 18 years of age. The table also shows that 6.9% of the respondents are in jss1, 9.9% in jss2, 14.2% in jss3, 18.5% in ss1, 28% in ss2 and 22.4% in ss3. For this study, it is right to assume that a high percentage are in senior secondary school. The data shows 58.2% of the respondents, more than half of the respondents had Facebook friends of 500 and above. The Table also indicates respondents and their number of hours spent on Facebook where 35.3% of the respondent spend 3 and below hours on Facebook, 24.1% of the respondents spend 4 to 6 hours on Facebook, 25% of the respondents spend 7 to 9 hours on Facebook while 15.5 % of the respondents spend 10 and above years on Facebook.

### **3.3 Materials and Measurement of Variables**

Several demographic or personal questions was asked to participants first, during the data collection process such as their gender, age range etc. This study adopts multiple choice questions for the demographic questions and a five Likert scale for Facebook addiction, cognitive development, affective development and academic performance.

#### **3.3.1 Demographic Questionnaire**

This questionnaire was developed by the researcher and included questions regarding the demographic background of participants. The scale was composed of 5 questions regarding participants which are: gender; age range; high school level; number of Facebook friends and daily hour spent on Facebook.

### **3.3.2 Facebook Addiction**

Facebook Addiction was measured with 9 items from Facebook implicit association scale from Turel and Serenko (2020). A list of questions about Facebook social media were asked to the students. Questions were asked regarding students Facebook addiction. A five-point Likert scale was utilized ranging from 1 for strongly-disagree to 5 strongly-agree. The reliability and validity scale for Facebook implicit association scale was found to be 0.81 (Turel & Serenko, 2020).

### **3.3.3 Affective Development**

Affective Development was measured with 5 items from School Engagement Scale designed by Fredricks et al. (2003). Questions seek to know if students feel happy or bored when they are in school; if students feel excited by the work they do in school; if classroom activities are interesting to them and; if the classroom is a fun place to be. A five-point Likert scale utilized for answers, ranging from 1 for strongly-disagree to 5 strongly-agree. The reliability and validity scale for school engagement scale was found to be 0.73 (Fredricks et al., 2003).

### **3.3.4 Cognitive Development**

Cognitive Development was measured with 4 items from School Engagement Scale from Fredricks et al. (2003) research. Students were asked a list of questions about cognitive development. The questions seek to know if students understand what they read; if students read extra books to know more about what they do in school; if students talk to people outside the school about what they are learning in class; and if students believe what they are learning in class are useful to them. A five-point Likert scale utilized for answers, ranging from 1 for strongly-disagree to 5 strongly-agree. The reliability and validity scale for school engagement scale is found to be 0.84 (Fredricks et al., 2003).

### **3.3.5 Academic Performance**

Academic performance was measured with 6 items from academic performance rating scale (DuPaul, Rapport & Perriello, 1991). Teachers were asked questions about their

students' academic performance. The questions seek to know if students accurately follow teachers' instructions; if students have good speaking skills; if students have good reading skills; if students complete written work in a careless and hasty fashion; if student always pays attention in the classroom; and if students have a quality and consistent academic performance. A five-point Likert scale utilized for answers, ranging from 1 for strongly-disagree to 5 strongly-agree. The reliability and validity scale for school engagement scale was found to be 0.76 (DuPaul, Rapport & Perriello, 1991).

### **3.4 Data Collection Procedure**

This research seek permission from different secondary school committee board and parents in the North Abeokuta region of Nigeria. This study also seek permission from the Near East University ethics committee. For this survey, participants are under 18 of age. This group are minors, as such, the class teachers and parents were available to also explain the process and content of the research to protect their rights within the research. The consent to administer this questionnaire to students was be applied to the school committee and approved by the management. The data were collected from students and teachers using a paper-form questionnaire. The questionnaire was structured and divided into two portion. The structured question including Facebook Social media addiction, affective development, and cognitive development. The demographic variable will comprise of gender, age range, high school level, number of Facebook friends and daily hour spent on Facebook

### **3.5 Data Analysis Procedure**

SPSS 22.0 (Statistical Program for Social Sciences) was used in frequency distribution test, normality test, and correlation and regression analysis in this study. First of all, descriptive statistics of participants were obtained, and normality of data was examined using skewness and kurtosis indicators. Detailed data properties are illustrated in the table below:

**Table 2:***Data Properties:*

<b>Variables</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std.D</b>	<b>skewness Statistics</b>	<b>skewness Std Error</b>	<b>Kurtosis Statistics</b>	<b>Kurtosis std Error</b>
Facebook addiction	232	1.00	5.00	2.610	1.116	0.410	0.160	-0.677	0.318
Affective development	232	1.00	5.00	3.460	0.866	-0.971	0.160	0.851	0.318
Cognitive development	232	1.00	5.00	3.069	1.134	0.160	0.160	-0.870	0.318
Academic performances	232	1.17	5.00	3.102	0.862	-0.375	0.160	-0.758	0.318

The skewness and kurtosis values represent the normal distribution of the data for all variables. George and Mallery's (2010) indicated the acceptable levels of skewness and kurtosis, which affirms that data can be deemed normally distributed as if the skewness and kurtosis values range from -2 to +2. The data analysis in the study includes parametric measuring demographic differences as related to Facebook addiction, affective development, cognitive development and academic performance, correlation and regression tests measuring relationship between Facebook addiction, affective development, cognitive development and academic performance.

## CHAPTER FOUR

### DATA ANALYSIS

This chapter provides information on the parametric test, correlation and regression test showing the relationship between variables.

**Table 3.**

*Correlation Data for Facebook Addiction, Affective Development, Cognitive Development and Academic Performance*

		Facebook Addiction	Affective Development	Cognitive Development	Academic Performance	Age
Facebook Addiction	r	1	-.494 .000**	-.461 .000**	-.606 .000**	.206 .002* *
Affective Development			1	.497 .000**	.512** .000**	- .208* *
Cognitive Development				1	.576 .000	-.189 .004* *



Academic	1	-.156
Performance		.018*
e		*
Gender		1

( $p \leq 0.05^*$ ,  $p < 0.01^{**}$ )

The correlation coefficient in table 3 shows the correlation matrix between Facebook addiction, affective development, cognitive development and academic performance. The results indicate that there is a relationship between Facebook addiction and affective performance where ( $p = 0.00^{**}$ ). The relationship between Facebook addiction and cognitive development is negative where ( $p = 0.00^{**}$ ). There is also a negative relationship between Facebook addiction and academic performance where ( $p = 0.00^{**}$ ).

**Table 4.**

*Regression analysis summary for Facebook Addiction on Affective Development*

Variable	B	B	T	P
Constant	4.460		35.343	.000**
Facebook Addiction	.175	-494	-8.615	.000**

*Dependent Variable: Affective development ( $p \leq 0.05^*$ ,  $p < 0.01^{**}$ )*

The table demonstrates that Facebook addiction ( $p = 0.000$ ) are significant to predict affective development. Taken together, 50% of variation in affective development can be explained by Facebook addiction.

**Table 5.**

*Regression analysis summary for Facebook Addiction on Cognitive Development*

Variable	B	B	T	P
Constant	4.292		25.456	.000**

Facebook Addiction	-.469	-.461	-7.888	.000**
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*Dependent Variable: Cognitive development (p≤0.05\*, p<0.01\*\*)*

The table demonstrates that Facebook addiction (p=0.000) are significant to predict cognitive development. Where, Facebook addiction accounts for around 50% of variation in affective development.

**Table 6.**

*Regression analysis summary for Facebook Addiction on Academic Performance*

Variable	B	B	T	P
Constant	4.323		.000**	
Facebook Addiction	-.468	-.606	.000**	

*Dependent Variable: Academic Performance (p≤0.05\*, p<0.01\*\*)*

The table demonstrates that Facebook addiction (p=0.000) are significant to predict academic development. Where, Facebook addiction accounts for around 60% of variation in academic performance.

**Table 7.**

*Gender Differences in Facebook Addiction, Affective development, Cognitive development and Academic Performance*

	Male			Female			T	P
	N	Mean	Std.Dev	N	Mean	Std.Dev.		
Facebook Addiction	119	2.4687	1.16814	113	2.7591	1.04262	3.975	0.05*

<i>Affective Development</i>	119	3.5479	.85943	113	3.3681	.86626	2.516	0.11
<i>Cognitive Development</i>	119	3.1765	1.19025	113	2.9558	1.06393	2.209	0.14
<i>Academic Performance</i>	119	3.2395	.88608	113	2.9572	.81521	6.357	0.01**

( $p \leq 0.05^*$ ,  $p < 0.01^{**}$ )

The results indicate that there is significant differences between male and female students with regard to Facebook addiction ( $p=0.05$ ) and academic performance ( $p=0.01$ ). Furthermore, there is no significant differences between male and female students with regard to affective development ( $p=0.11$ ) and cognitive development ( $p=0.14$ ).

**Table 8.**

*Differences in High school Level across Facebook Addiction, Affective development, Cognitive development and Academic Performance*

		<b>N</b>	<b>Mean</b>	<b>Std.Dev</b>	<b>T</b>	<b>P</b>
<i>Facebook Addiction</i>	JSS1	16	1.1458	.40311	8.123	0.00**
	JSS2	23	2.3237	.94454		
	JSS3	33	2.5556	1.17425		
	SS1	43	2.667	1.00645		
	SS2	65	2.8547	.97141		
	SS3	52	2.867	1.21032		
<i>Affective Development</i>	JSS1	16	4.1375	.20290	4.186	0.00**
	JSS2	23	3.7304	.45371		
	JSS3	33	3.5879	.69451		
	SS1	43	3.3581	1.05249		
	SS2	65	3.4400	.85965		
	SS3	52	3.1615	.86559		
<i>Cognitive Development</i>	JSS1	16	4.1563	4.1563	4.253	0.00
	JSS2	23	3.1196	3.1196		

	JSS3	33	3.2879	3.2879		
	SS1	43	2.7907	2.7907		
	SS2	65	2.9462	2.9462		
	SS3	52	2.9567	2.9567		
<i>Academic Performance</i>	JSS1	16	3.8021	3.8021	3.588	0.00**
	JSS2	23	3.3116	3.3116		
	JSS3	33	3.1061	3.1061		
	SS1	43	3.1085	3.1085		
	SS2	65	2.8365	3.0615		
	SS3	52	3.1020	2.8365		

( $p \leq 0.05^*$ ,  $p < 0.01^{**}$ )

The results indicate that there is a significant difference between high school level of students with regard to Facebook addiction ( $p=0.00$ ), affective development ( $p=0.00$ ), cognitive development ( $p=0.00$ ) and academic performance ( $p=0.00$ ).

### Table 9.

*Differences between Number of Facebook friends across Facebook Addiction, Affective development, Cognitive development and Academic Performance*

		<b>N</b>	<b>Mean</b>	<b>Std.Dev</b>	<b>T</b>	<b>P</b>
<i>Facebook Addiction</i>	1-149	29	1.4406	.71546	16.101	.00**
	150-299	28	2.5635	.86645		
	300-499	40	2.5528	1.02748		
	500&above	135	2.8881	1.09814		
<i>Affective Development</i>	1-149	29	3.9172	.50005	6.239	.00**
	150-299	28	3.8071	.47604		
	300-499	40	3.4450	.80573		

	500&above	135	3.2948	.95224		
<i>Cognitive Development</i>	1-149	29	3.6207	1.23314	4.906	.00**
	150-299	28	3.4643	.90194		
	300-499	40	2.8063	1.05989		
	500&above	135	2.9463	1.12775		
<i>Academic Performance</i>	1-149	29	3.8021	.70749	9.489	.00**
	150-299	28	3.3116	.70322		
	300-499	40	3.1061	.77239		
	500&above	13565	3.1085	.87248		
					3.1085	

( $p \leq 0.05^*$ ,  $p < 0.01^{**}$ )

The results indicate that there is a significant difference between number of Facebook friends of students with regard to Facebook addiction ( $p=0.00$ ), affective development ( $p=0.00$ ), cognitive development ( $p=0.00$ ) and academic performance ( $p=0.00$ ).

**Table 10.**

*Differences between Daily Hours Spent on Facebook across Facebook Addiction, Affective development, Cognitive development and Academic Performance*

		<b>N</b>	<b>Mean</b>	<b>Std.Dev</b>	<b>T</b>	<b>P</b>
<i>Facebook Addiction</i>	3-below	82	1.9932	.92755	21.946	.00**
	4-6h	56	2.8095	1.08198		
	7-9h	58	2.7203	.96062		
	10h&above	36	3.5278	1.02159		

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<i>Affective</i>	3-below	82	3.6559	.68857	6.412	.00**
<i>Development</i>	4-6h	56	3.5179	.87284		
	7-9h	58	3.4379	.78625		
	10h&above	36	2.9389	.86559		
<i>Cognitive</i>	3-below	82	3.3994	1.07573	5.551	.00**
<i>Development</i>	4-6h	56	3.1071	1.07325		
	7-9h	58	2.8750	1.13346		
	10h&above	36	2.5694	1.23000		
<i>Academic</i>	3-below	82	3.3476	.87452	7.751	.00**
<i>Performance</i>	4-6h	56	3.1101	.77167		
	7-9h	58	3.0891	.87113		
	10h&above	36	2.5509	.82789		
				.86213		

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( $p \leq 0.05^*$ ,  $p < 0.01^{**}$ )

The results indicate that there is a significant difference between daily hours spent on Facebook by students with regard to Facebook addiction ( $p=0.00$ ), affective development ( $p=0.00$ ), cognitive development ( $p=0.00$ ) and academic performance ( $p=0.00$ ).

## **CHAPTER FIVE**

### **DISCUSSION**

This study is an effort to examine the relationship between Facebook social media addiction, affective and cognitive development and academic performance among secondary school students in Northern Region of Abeokuta in Nigeria. Through data collected from 232 participants of this study the results are elicited. According to the results, there is a significant negative relationship between Facebook addiction on affective development, cognitive development and academic performance.

The findings show that there is a significant negative correlation between Facebook addiction and affective development. Asogwa, (2017) and Santrock (2015) supports the argument that Facebook addiction and affective development are related. The finding of Lau (2017) supports the argument that Facebook addiction and cognitive development are related. Naqshbandi et al. (2017) states that Facebook addiction predict academic performance. The study collected data from students in five public universities in Malaysia. The result confirms that Facebook addiction predict academic performance. Ainin et al. (2015) confirms that Facebook excess usage affect students in terms of welfare, fitness, mental growth, learning, self-esteem, academic achievement and performance.

The result in this study supports that there are a gender differences regarding Facebook addiction and academic performance but no gender difference regarding affective development and cognitive development. The result of a study by Pontes et al. (2018) supports the result of this study that female students are more affected by Facebook

addiction, particularly because addiction traits are more common among male and extroverted personalities.

There is also a high school level differences regarding Facebook addiction, affective development, cognitive development and academic performance. According Xie and Karan (2019), social media addiction is more in older adolescent in higher school level in secondary schools affecting academic performance, affective development and cognitive development. The older adolescent group and higher class level are predictors of addiction and anxiety. There are differences in number of Facebook friends of secondary school students in relation to Facebook addiction, affective development, cognitive development and academic performance. Simsek et al. (2019) supports this argument that students with above 500 number of Facebook friends are more affected by Facebook addiction, affective development, cognitive development and academic performance. An increase in the number of Facebook friends increase duration of use increase addiction level.

There is a daily hours spent on Facebook differences regarding Facebook addiction, affective development, cognitive development and academic performance. These results are supported by previous finding of Mahmood et al. (2020) using a sample of university students in Pakistan. Results indicate that student with more than 200 Facebook friends are more affected with Facebook addiction, affective development, cognitive development and academic performance because it increases the duration of use. Facebook is a leading social networking platforms for teenagers. 70% of respondents at least spent 3 hours and more on Facebook every day in the current research. Facebook remains the favored method for student social networking (Toker & Baturay, 2019). Facebook gives its users freedom to post information, such photos, preferred music or movies and even contact information about themselves on their accounts. It should be noted in the current research that over half of the respondents had three-hundred friends and more on Facebook. Results from the high intensity of the Facebook usage by secondary school students has adequately effect on Facebook addiction, affective development, cognitive development and academic performance of students. Facebook application features like pop-up and push alerts, multifunctional features and auto



disclosure capabilities on Facebook expose secondary school children to excessive information, frequent contact, and social requests.

When the usage level of social media exceeds students' processing skills, they may feel overwhelmed and lose control of circumstances, resulting in different social media addiction. Addiction caused by high daily hours spent on Facebook impacts the psychological wellbeing of pupils and impairs their academic achievement. Under the circumstances of addiction from using social media in the school environment which lead to insufficient time for learning. The stressor–strain outcome model, provides effective approach in combining certain outcomes (social media addiction) and the negative role of the environmental stimuli in the affective development and cognitive development of secondary school students. In particular, it highlights the negative role played by social media addiction.

This research is also theoretically supports the U&G theory. Secondary school students use Facebook to communicate. Secondary school students are using Facebook to describe their need for personal identity, social status and confidence. Based on U& G theory and past studies, Facebook may be utilized as a medium for the public expression by secondary school pupils and a reinforcement of their views (Raza et al. 2020). The findings showed time spent on social media and large numbers of followers leads to high risk of addiction and low academic performance. This may divert pupils from academic achievement, and having a potential impact on society's production level.

## **CHAPTER SIX**

### **CONCLUSION AND RECOMMENDATION**

#### **6.1 Conclusion**

This study shows that Facebook addiction is related to affective development, cognitive development and academic performance among high School pupils. This study is also in line with empirical finding which suggests the connection that there is relationship between demographic factors regarding Facebook addiction, affective development, cognitive development and academic performance. This study reveal that female students and older adolescent are more affected by Facebook addiction because of their anxiousness to reach adulthood.

This study found that, although students can use social media networks such as Facebook for information sharing, building relationships, participating in group debates and also for recreational activities, excessive use could lead to addiction and distraction from academic attention.

#### **6.2 Recommendation for Practice**

The following suggestions are given in light of the findings:

1. Mobile phone devices should be prohibited from use in secondary school environments as most students use their personal phones during school hours.
2. Students should be advice to turn off their notification on Social media application like Facebook and others

3. High school administrative, teachers and parents can implement these rules in limiting access to Facebook and other social networking sites that have a tendency to divert students' attention during school hours or when studying at home.

### **6.3 Recommendation for Further Studies**

Future studies can investigate the relationship between addictions to other social media platform on academic performance among high school students. To increase generalizability, a bigger and more representative sample should be used in future research.

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## APPENDIX 1

### Facebook implicit association scale (Trul and Serenko, 2020)

Facebook social media activity will be measured with 9 items adopted from Trul and Serenko (2020) Facebook implicit association scale, capturing an excessive use of Facebook while adopting a five Likert scale. The Cronbach alpha of Facebook social media activity is found to be 0.81.

<b>Questions about Facebook Social Media</b>	Strongly Disagree	Disagree	Uncertain	Agree	Strongly agree
I sometimes neglect school activities because of my interest in Facebook					
My school activities has sometimes suffered because of the time I spend on Facebook					
Using Facebook sometimes interfered with school activities					

## APPENDIX 2

### School engagement scale (Fredricks, Blumenfeld, Friedel and Paris, 2003)

Affective development will be measured with 5 items and cognitive development measured with 4 items using a five Likert scale. Five-point Likert scale is utilized for each variable ranging from 1 for strongly-disagree to 5 for strongly-agree.

<b>Questions about Affective Development</b>	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
I feel happy when I am in school					
I feel bored when I am in school					
When I read a book I always ask myself questions to make sure I know what is about					

### APPENDIX 3

#### Academic performance rating scale (DuPaul, Rapport and perriello, 1991)

Teachers were asked about their students' academic performances. Also academic performances was measured with 6 items. The Cronbach alpha of academic performances is found to be 0.76. Five-point Likert scale is utilized for the academic performance variable ranging from 1 for strongly-disagree to 5 for strongly-agree.

<b>Questions about Academic Performance</b>	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
Student accurately follows teachers instructions					
Student has a good speaking skills					
Student has a good reading skills					

## APPENDIX 4:

# INSTRUMENT PERMISSION LETTER AND FEEDBACK

 Gmail Aishat Ibrahim <Aishatibrahim1997@gmail.com>

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### Instrument Permission Letter

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Aishat Ibrahim Aishatibrahim1997@gmail.com

Fri, April 30, 2021 at 5:57

AM

Sent To: [oturel@fullerton.edu](mailto:oturel@fullerton.edu)

I am a student at Near East University, department of General Psychology, in pursuit of completing my Master's thesis. I am writing to ask written permission to use the Social media or internet addiction instrument in my research study. My research is intended to the effects of Facebook Social Media on the Affective and Cognitive Development of Abeokuta North Senior Secondary School Students in Nigeria and its impact on their Academic Performances. My research is being supervised by my Dr. Gloria Manyeruke

I would like to use and reproduce your instrument under the following conditions:

- I will use the instrument only for my research study and will not sell or use it for any other purposes
- I will include a statement of attribution and copyright on all copies of the instrument. If you have a specific statement of attribution that you would like for me to include, please provide it in your response.
- At your request, I will send a copy of my completed research study to you upon completion of the study and/or provide a hyperlink to the final manuscript

If you do not control the copyright for these materials, I would appreciate any information you can provide concerning the proper person or organization I should contact.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail at [Aishatibrahim1997@gmail.com](mailto:Aishatibrahim1997@gmail.com).

Sincerely,

Aishat Idowu Alamu

Instrument Permission Letter

Inbox



[oturel@fullerton.edu](mailto:oturel@fullerton.edu) >

Friday, April  
30, 7:19 PM

to Aishatibrahim

Hello Aishat,

You have my permission to use the social media research instrument and measurements.

Ofir Turel  
Information Systems and Decision Sciences,  
California State University Fullerton,

Fullerton, USA  
Email: [oturel@fullerton.edu](mailto:oturel@fullerton.edu)

---

**Instrument Permission Letter****Inbox**

jfred@conncoll.edu> Friday, April  
30, 2:32 PM

to Aishatbrahim

Hello Aishat,  
You can go ahead and use the measures

**Jennifer A. Fredricks**  
Connecticut College,  
New London, CT, USA,  
jfred@conncoll.edu

**Instrument Permission Letter****Inbox**

gjd3@lehigh.edu> Thursday, May  
6, 9:45 AM

to Aishatbrahim

Hello Aishat Ibrahim,  
I grant you my consent.

Regards.

Professor George J DuPaul  
School of Psychology  
Lehigh University  
Pennsylvania, USA,  
Email: gjd3@lehigh.edu

## APPENDIX 5

### ETHICS COMMITTEE APPROVAL

---



#### BİLİMSEL ARAŞTIRMALAR ETİK KURULU

14.07.2021

Dear Aishat Idowu Alamu

Your application titled “**The Influence Of Facebook Addiction On The Academic Performance, Affective And Cognitive Development Of Secondary School Students.**” with the application number NEU/SS/2021/1067 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol  
Rapporteur of the Scientific Research Ethics Committee

*Direnç Kanol*

**Note:**If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.

## APPENDIX 6

### PLAGIARISM REPORT

thesis

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ORIGINALITY REPORT

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